

ABSTRACT OF THE DISCLOSURE

A system and method for channel estimation in a wireless local area network. A corresponding channel estimation method includes the steps of: receiving a preamble message and disspreading the preamble message into several symbol signals, each symbol
5 signal containing several discrete signals; determining for each symbol signal a peak sign assignment; establishing several data windows for the symbol signals at the starting points of the discrete signals; multiplying the discrete value of each discrete signal of each data window by the corresponding peak sign assignment and accumulating the product in the first data frame; repeating the above steps for the next discrete signal and accumulating
10 them in the second data frame, ..., the Nth data frame; computing the accumulated value in the data frames and obtaining the data frame with the maximum value; estimating a channel signal from the previously determined data frame.